

## ABSTRACT OF DISCLOSURE

The invention relates to a method for performing frequency synchronization of a base station, and to a network part. In the method, the following operations are performed: maintaining a reference clock in a network element of the cellular radio network; generating a time stamp signal in the reference clock; transferring the time stamp signal from the network element to the base station over an asynchronous data transmission connection; calculating on the basis of the transferred time stamp signal how much the time by the local clock at the base station deviates from the time by the reference clock; generating a speed correction factor for the local clock on the basis of at least one calculated deviation; correcting the running of the local clock with the speed correction factor; and generating the frequencies needed at the base station by using the local clock corrected with the speed correction factor.